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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/038,142

Filing Date: October 22, 2001

Appellant(s): TABATABAI ET AL.

Sheryl Sue Holloway, Reg.No. 37850
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 02/13/2008 appealing from the Office action mailed 02/21/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Paek (US Patent 7143434) November 28, 2006

Vandersluis (US Patent 7165073) January 16, 2007

Srivastava et al. (US Patent 6549922) April 15, 2003

W3C Organization Press Release titled 'W3C Issues XSL Transformations (XSLT) and XML Path Language (XPath) as Recommendations', and the XPath Specifications document referenced therein, dated November 16 1999.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites 'access unit' and 'fragment update command', said terms being undefined with no particular context given and no utility/application indicated. The claim(s) is considered broad and indefinite, as one of ordinary skill in the art would not be able to ascertain the scope and application of said 'access unit' and 'fragment update command'.

While the inventor may define specific terms used to describe invention, the inventor must do so "with reasonable clarity, deliberateness, and precision" and, if done, must "set out the inventor's uncommon definition in some manner within the patent disclosure' so as to give one of ordinary skill in the art notice of the change" in meaning. Any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention.

For the purpose of examination the term 'access unit' is interpreted to be a data portion in a hierarchical data tree, said data containing multimedia description information in a markup language format.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-35, 37-65,67-90 rejected under 35 U.S.C. 103(a) as being unpatentable over Paek (US Patent 7143434) in view of Vandersluis (US Patent 7165073).

With respect to Claim 1, Paek discloses a method comprising: forming an access unit corresponding to a fragment of a multimedia description, comprising a fragment update, (Paek-Column 3 Lines 50-55, Column 23 Lines 40-45) the fragment update forming an encoded data stream from the access unit.(Paek-Column 26 Lines 15-35)

However while Paek disclosed updating fragments [segments], Paek did not disclose (re. Claims 1,2,22) the fragment update comprising a fragment update command. Paek did not disclose (re. Claims 1,2,22) the fragment update comprising a fragment update command wherein the fragment update command specifies a type of command for execution by a decoder to update a multimedia description.

Vandersluis disclosed (re. Claim 1) an update command for manipulating hierarchical data, as applied to XML data streams. (Vandersluis-Column 7 Lines 30-35, Column 10 Lines 30-65, Column 11 Lines 1-65, Column 20 Lines 10-20) Furthermore, Vandersluis disclosed (re. Claims 1) the fragment update comprising a fragment update

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command (Column 10 Lines 30-40, 'replacement operation') wherein the fragment update command specifies a type of command for execution by a decoder to update a multimedia description. (Vandersluis- Column 11 Lines 1-5, Column 11 Lines 30-55)

The Examiner notes that an update operation may be implemented as a combination of an insert and delete command.

Paek and Vandersluis are analogous art because they present concepts and practices regarding the encoding and decoding of XML data elements. At the time of the invention it would have been obvious to combine the teachings of Vandersluis regarding including update commands into the method and system of Paek. The motivation for doing so would have been to allow for content-exchange for MPEG-7 video editing as desired by Paek (Paek-Column 2 Lines 35-40), such the processing application is able to flexibly select only those portions of the data file that suits the particular purpose at the time (Vandersluis-Column 4 Lines 25-30)

Claims 2 and 22 are rejected on the same basis as Claim 1.

With respect to Claim 2, Paek-Vandersluis disclosed wherein the fragment update command is selected from a group consisting of add, delete, change, and reset commands. (Vandersluis-Column 11 Lines 1-5, Column 20 Lines 10-20)

With respect to Claim 3, Paek-Vandersluis disclosed wherein the fragment update further comprises a value. (Paek-Column 26 Lines 15-35)

)

With respect to Claim 4, Paek-Vandersluis disclosed wherein the fragment update further comprises a fragment reference wherein the fragment reference is a pointer to a fragment to be used by the fragment update command. (Paek-Column 28 Lines 20-25, Column 19 Lines 35-40)

With respect to Claim 5, Paek-Vandersluis disclosed wherein the fragment reference is a uniform resource identifier (URI). (Paek-Column 25 Lines 10-15)

With respect to Claim 7, Paek-Vandersluis disclosed wherein the fragment update further comprises a payload. (Paek-Column 26 Lines 15-35)

With respect to Claim 8, Paek-Vandersluis disclosed wherein the fragment is in a first node. (Paek-Column 27 Lines 20-25)

With respect to Claim 9, Paek-Vandersluis disclosed wherein the fragment reference is in a second node and the first node and the second node are the same node. (Paek-Column 9 Lines 60-65)

With respect to Claim 10, Paek-Vandersluis disclosed wherein the first node and the second node are in a Moving Picture Experts Group (MPEG) description. (Paek-Column 9 Lines 1-5)

With respect to Claim 11, Paek-Vandersluis disclosed wherein the fragment reference is in a second node and the first node and the second node are different nodes. (Paek-Column 10 Lines 20-25)

With respect to Claim 12, Paek-Vandersluis disclosed wherein the first node and the second node are in a Moving Picture Experts Group (MPEG) description. (Paek-Column 9 Lines 1-5)

With respect to Claim 13, Paek-Vandersluis disclosed determining if a multimedia description corresponding to the access unit has changed; identifying a changed portion of the multimedia description and a corresponding access unit; and forming the fragment update to correspond to the changed portion of the multimedia description. (Vandersluis-Column 11 Lines 1-5, Column 20 Lines 10-20)

With respect to Claim 14, Paek-Vandersluis disclosed associating the access unit with a partial description. (Paek-Column 20 Lines 10-15)

With respect to Claim 15, Paek-Vandersluis disclosed wherein the partial description comprises an instance of a descriptor. (Paek-Column 26 Lines 45-50)

With respect to Claim 16, Paek-Vandersluis disclosed associating the access unit with a reset point that contains a fragment that forms a complete description. (Paek-Column 27 Lines 20-25)

With respect to Claim 17, Paek-Vandersluis disclosed the method of claim 4 wherein the, fragment is stored on a different system than a system performing the method of claim 1. (Vandersluis-Column 5 Lines 50-60)

With respect to Claim 18, Paek-Vandersluis disclosed the method of claim 1 wherein the access unit corresponds to a description, and further comprising: transmitting the encoded data stream while the description is static. (Vandersluis-Column 7 Lines 30-35)

With respect to Claim 19, Paek-Vandersluis disclosed wherein the access unit corresponds to a description, and further comprising: transmitting the encoded data stream while the description is dynamic. (Vandersluis-Column 7 Lines 30-35)

With respect to Claim 20, Paek-Vandersluis disclosed transmitting a data for decoding to a decoder. (Vandersluis-Column 5 Lines 50-60)

With respect to Claim 21, Paek-Vandersluis disclosed wherein the data include schemas defining a description data to be transmitted. (Vandersluis-Column 5 Lines 50-60)

Claims 22-30 are rejected on the same basis as Claims 1-21.

With respect to Claim 25, Paek-Vandersluis disclosed wherein the first fragment reference is in hyper-text transfer protocol (HTTP). (Paek-Column 26 Lines 60-65)

With respect to Claim 27, Paek-Vandersluis disclosed further comprising: identifying a second node which the command affects; and identifying a second fragment reference which the first fragment reference points to, wherein the second fragment reference points to the first referenced fragment. (Vandersluis-Column 11 Lines 30-55)

With respect to Claim 29, Paek-Vandersluis disclosed wherein the second fragment reference points to a second referenced fragment within the first node, (Vandersluis-Column 11 Lines 30-55) further comprising: replacing the first fragment reference with a third fragment reference pointing to the second referenced fragment. (Vandersluis-Column 11 Lines 30-55)

With respect to Claim 30, Paek-Vandersluis disclosed wherein the second fragment reference points to a second referenced fragment within the first node, (Vandersluis-Column 11 Lines 30-55) further comprising: replacing the first fragment reference with a third fragment reference pointing to a third referenced fragment within the second node. (Vandersluis-Column 11 Lines 30-55)

With respect to Claims 31-35, 37-51, the Applicant describes a computer readable medium containing computer executable instructions to perform the method described in Claims 1-21, said instructions having the same limitations as described in Claims 1-21. Claims 31-35, 37-51 are rejected on the same basis as Claims 1-21, as applied above.

With respect to Claims 61-65, 67-81, the Applicant describes a system having the same limitations as described in Claims 1-21. Claims 61-65, 67-81 are rejected on the same basis as Claims 1-21, as applied above.

With respect to Claims 52-60, the Applicant describes a computer readable medium containing computer executable instructions to perform the method described

in Claims 22-30, said instructions having the same limitations as described in Claims 22-30. Claims 52-60 are rejected on the same basis as Claims 22-30, as applied above.

With respect to Claims 82-90, the Applicant describes a computer readable medium containing computer executable instructions to perform the method described in Claims 22-30, said instructions having the same limitations as described in Claims 22-30. Claims 82-90 are rejected on the same basis as Claims 22-30, as applied above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 36, and 66 rejected under 35 U.S.C. 103(a) as being unpatentable over Paek (US Patent 7143434) in view of Vandersluis (US Patent 7165073) as applied to Claims 1-5, 7-35, 37-65,67-90 above, and further in view of Srivastava et al. (US Patent

6549922), hereinafter referred to as Srivastava , further in view of the W3C Organization Press Release titled 'W3C Issues XSL Transformations (XSLT) and XML Path Language (XPath) as Recommendations', and the XPath Specifications document referenced therein, dated November 16 1999.

With respect to Claims 6, 36, and 66, the combination of Paek-Vandersluis substantially discloses the limitations as described in the said claims.

However Paek-Vandersluis does not disclose a fragment reference that is in XPath (extensible markup language path language).

XPath is a language for addressing parts of an XML document, designed to be used by both XSLT and Xpointer. XPath gets its name from its use of a path notation as in URLs for navigating through the hierarchical structure of an XML document. In addition to its use for addressing, XPath is also designed so that it has a natural subset that can be used for matching (testing whether or not a node matches a pattern). Using XPath functions can reduce the amount of programming required when a system receives the XML data.

Srivastava discloses of a method for representing multimedia content using a standard data representation format using XML. Srivastava extracts data from the multimedia content and forms metadata for said content. The said metadata may

reference URL of Internet data which contains externally located metadata which describes the media file. Srivastava also provides a graphical user interface for editing the media file and the metadata. (Column 3 Lines 1-60)

Paek-Vandersluis and Srivastava are analogous art because they present concepts and practices regarding data representation for multimedia content. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teachings of Srivastava into the combination of Paek-Vandersluis, such that the metadata for the media content in the fragment references of Paek-Vandersluis are represented using the XML format. The motivation for said combination would have been, as Srivastava suggests, in order to take advantage of the XML standard for facilitating automated media management solutions. Currently, Srivastava writes, there is no unified way of capturing and using MPEG-7 metadata in application programs. Instead, special-purpose routines must be written by the application programmer to handle each of the wide variety of metadata storage techniques used by different proprietary media formats. (Column 1 Lines 30-35) By using a well-defined XML structure, a unified representation for the metadata is achieved. (Column 7 Lines 60)

However Srivastava does not disclose using XPath with XML documents, such that the references contained in the XML document can be located, filtered, matched, or transformed using XPath functions.

The W3C Press Release announces the creation and availability of the XPath language specifications. Together with XSLT, XPath makes it possible for XML documents to be reformatted according to the parameters of the XSL style sheets, and build presentation flexibility into the XML architecture.

At the time of the invention it would have been obvious to use XPath in the XML documents as taught by the combination of Paek-Vandersluis-Srivastava , such that the parts of the XML documents are easily matched, filtered, or transformed according to a specified rule or condition. The motivation for combining XPath into the combined teachings of Paek-Vandersluis-Srivastava would have been, as the W3C press release suggests, to facilitate delivery of rich, structured data content to a wider range of devices.

(10) Response to Argument

The Applicant presents the following argument(s) *[in italics]*:

... Paek's does not teach or even suggest that the image description record is a data structure that is transmitted through a network...

The Examiner respectfully disagrees with the Applicant. Paek Column 17 Lines 10-30 disclosed a client-server system for acquiring digital data representing video content and Paek Column 24 Lines 5-15 disclosed a client receiving digital data representing video content over a bidirectional communications port. Furthermore Paek

Column 20 Lines 20-25 disclosed a related application (US Serial 10/728435) fully incorporated by reference hereinafter referred to as Paek2. Paek2 (Figures 12-13, Page 22-23) disclosed wherein said client terminals are able to access editing engine within the server via heterogeneous networks.

Thus Paek disclosed *that the image description record is a data structure that is transmitted through a network.*

The Applicant presents the following argument(s) *[in italics]*:

...none of the descriptions are disclosed by Paek as being used to update fragments of multimedia information. Instead, Paek's description merely define the existing features of the multimedia information.

The Examiner respectfully disagrees with the Applicant.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

Paek is not relied upon to disclose updating fragments of multimedia information, even though Paek clearly suggests an updating process. (Paek-Column 2 Lines 30-45, 'manipulate the heterogeneous data descriptions... using a video editor')

Vandersluis disclosed (re. Claim 1) an update command for manipulating hierarchical data, as applied to XML data streams. (Vandersluis-Column 7 Lines 30-35, Column 10 Lines 30-65, Column 11 Lines 1-65) Furthermore, Vandersluis disclosed (re. Claims 1) the fragment update comprising a fragment update command (Column 10 Lines 30-40, 'replacement operation') wherein the fragment update command specifies a type of command for execution by a decoder to update a multimedia description. (Vandersluis- Column 11 Lines 1-5, Column 11 Lines 30-55)

The Examiner notes that an update operation may be implemented as a combination of an insert and delete command.

The Applicant presents the following argument(s) *[in italics]*:

Paek does not teach or suggest that the DTD itself is an encoded data stream. In addition, Paek does not disclose that the DTD is created from the video objects and video object hierarchies stored in the image description record. Therefore, Paek does not teach or suggest Appellant's access unit, fragment update, or encoded data stream as claimed.

The Examiner respectfully disagrees with the Applicant.

As presented above, where Paek-Paek2 disclosed a client-server system for processing data representing video content, and wherein the client exchanges data with the server via a network, and wherein a client receives digital data representing video content over a bidirectional communications port, the Examiner concludes that the Paek-Paek2 disclosed that the DTD itself is an encoded data stream.

The Applicant presents the following argument(s) [*in italics*]:

Vandersluis cannot be properly interpreted as teaching or suggesting Appellant's fragment update command that specifies a type of command to update a multimedia description. Vandersluis further cannot be properly interpreted as teaching or suggesting Appellant's fragment update command that is part of an access unit that is claimed as being a network transmission data structure. Therefore, Vandersluis does not disclose the fragment update command as claimed.

The Examiner respectfully disagrees with the Applicant.

The Examiner notes that Paek disclosed (Column 4 Lines 5-15) object hierarchy processing of the video content, said objects hierarchy being comprised of data descriptions of video content.

Vandersluis disclosed (re. Claim 1) an update command for manipulating hierarchical data, as applied to XML data streams. (Vandersluis-Column 7 Lines 30-35, Column 10 Lines 30-65, Column 11 Lines 1-65, Column 20 Lines 10-20) Furthermore, Vandersluis disclosed (re. Claims 1) the fragment update comprising a fragment update command (Column 10 Lines 30-40, 'replacement operation') wherein the fragment update command specifies a type of command for execution by a decoder to update a multimedia description. (Vandersluis- Column 11 Lines 1-5, Column 11 Lines 30-55)

The Examiner notes that an update operation may be implemented as a combination of an insert and delete command.

The Applicant presents the following argument(s) *[in italics]*:

... neither Srivastava nor the W3C press release teach or suggest an access unit, or a fragment update command, or an encoded data stream as claimed by Appellant in claim 6.

The Examiner respectfully disagrees with the Applicant. As presented above the combination of Paek-Vandersluis disclosed *an access unit and a fragment update command* .

Srivastava discloses of a method for representing multimedia content using a standard data representation format using XML. Srivastava extracts data from the

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multimedia content and forms metadata for said content. The said metadata may reference URL of Internet data which contains externally located metadata which describes the media file. Srivastava also provides a graphical user interface for editing the media file and the metadata. (Column 3 Lines 1-60)

The W3C Press Release announces the creation and availability of the XPath language specifications. Together with XSLT, XPath makes it possible for XML documents to be reformatted according to the parameters of the XSL style sheets, and build presentation flexibility into the XML architecture.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/G. B./

Examiner, Art Unit 2144

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144

Conferees:

/William C. Vaughn, Jr./

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